



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,579	10/04/2001	Hiroaki Ono	112857-296	1213

29175 7590 05/27/2005

BELL, BOYD & LLOYD, LLC  
P. O. BOX 1135  
CHICAGO, IL 60690-1135

EXAMINER
----------

BAYAT, ALI

ART UNIT	PAPER NUMBER
----------	--------------

2625

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/970,579 ✓

Applicant(s)

ONO ET AL

Examiner

Ali Bayat

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 12/20/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 is/are allowed.
- 6) ☒ Claim(s) 19-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments, see pages 2-3 of Applicant's remarks, filed 12/20/04, with respect to the rejection(s) of claim(s) 1-18 under 35 USC 102/103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection for claims 19-30 is made in view of Deshon et al. (U.S. 5,237,402) and Shiota et al. (US 2002/0034336 A1).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19,21-23,25-27 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Deshon et al. (U.S. 5,237,402).

In regard to claim 19, Deshon provides for an image processing apparatus for correcting a gradation of input image data, comprising: a first generating section for generating a first look up table using the input image data (Fig.1 element 12 col.4, lines 13-15); a second generating section for generating a second look up table based on the first look up table and human visual characteristics (Fig.1 element 16, col.4 lines 25-29, note that second LUT employs "a gamma correction curve having a gamma of approximately 2.2" which corresponds to human visual characteristics) ; and a

Art Unit: 2625

transforming section for transforming the image data using the second look up table ( Fig.1 elements 18 and 20, col.4 lines 29-35).

With regard to claims 21,25 and 29, Deshon provides for an apparatus, wherein the second generating section generates the second look up table using a predetermined logarithm curve as the human visual characteristics (Fig.1 element 16, col.4 lines 25-29, note that second LUT employs "a gamma correction curve having a gamma of approximately 2.2" which corresponds to human visual characteristics).

As to claims 22,26 and 30, Deshon provides for an apparatus, wherein the transforming section transform a dynamic range of the intensity levels of the image data using the second look up table (Fig.1 elements 18 and 20, col.4 lines 29-35).

In regard to claim 23, see the rejected claim 19. It recites similar limitations as claim 23. Hence it is similarly analyzed and rejected.

With regard to claim 27, see the rejected claim 19. It recites similar limitations as claim 27. Except for a storage medium (Fig.1 element 4, col.3 lines 52-55, note recorded image). Hence it is similarly analyzed and rejected.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20,24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deshon et al. (US 5,237,402) in view of Shiota et al. (US 2002/0034336A1).

Art Unit: 2625

In regard to claims 20,24 and 28 Deshon provides for a first look up table that performs tonescale transformations. Deshon does not expressly disclose look up table that is based on a histogram of intensity levels of the image data. Shiota provides for a look up table that is based on a histogram of intensity levels of the image data (Fig.10, element 44, paragraph 143). The prior art of Deshon and Shiota are combinable because they are from the same field of endeavor (image transformation). It would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Shiota with the system and method of Deshon, because the invention of Shiota calculates a maximum image density and a minimum image density from the image information stored in the prescan memory 12 (Fig.10, element 44, paragraph 143).

***Allowable Subject Matter***

4. Claims 1-18 are allowed.

The following is an examiner's statement of reasons for allowance: the closest prior art of Deshon provides for a first generating section for generating a first look up table using the input image data (Fig.1 element 12), a second generating section for generating a second look up table based on the first look up table and human visual characteristics (Fig.1 element 16). The prior art of Deshon failed to teach or suggest for a combining section for generating a third look up table by combining the first and second look up tables according to a predetermined combining ratio; and transforming section for transforming the image data using the third look up table.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 2625

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Bayat whose telephone number is 571-272-7444. The examiner can normally be reached on M-F 5:00-7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ali Bayat *AB*  
Patent Examiner  
Group Art Unit 2625  
5/20/05

✓ *Kanji Patel*  
KANJI BHAI PATEL  
PRIMARY EXAMINER